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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,324	10/14/2003	Scott J. Tuman	58658US002	8254

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EXAMINER	
WARTALOWICZ, PAUL A	

ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/686,324	TUMAN ET AL.	
	Examiner	Art Unit	
	Paul A. Wartalowicz	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-38 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-38 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 14 October 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1, 6, 10, 16, 17, 18, 19, 24, 27, 31, 32, 35 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C 112, second paragraph, as being indefinite because of the recitation "a hook element containing backing element having a first outer face and a second outer face, and hook elements...". Does the hook element contain the backing? It is unclear what this recitation means.

Claim 6 is rejected under 35 U.S.C 112, second paragraph, as being indefinite because of the recitation " are mutually parallel". Are the strands parallel with other strands, with each individual strand? It is unclear what this recitation means.

Claim 10 recites the limitation "unbonded carded nonwoven web" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 is rejected under 35 U.S.C 112, second paragraph, as being indefinite because of the recitation "in a direction transverse to the first set of strands". It is unclear what the direction transverse to the first set of strands is. Is the direction opposite, perpendicular? It is unclear what this recitation means.

Claim 17 is rejected under 35 U.S.C 112, second paragraph, as being indefinite because of the recitation "substantially parallel". Two lines are either parallel or non-parallel. There is no substantially parallel.

Claim 18 recites the limitation "oriented strands" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "netting" in lines 2 and 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 24 is rejected under 35 U.S.C 112, second paragraph, as being indefinite because of the recitation "second set of strands have surface structures on said first faces of the strands". What comprises the surface structures on the first faces of the strands? It is unclear what this recitation means.

Claim 27 is rejected under 35 U.S.C 112, second paragraph, as being indefinite because of the recitation "extend in the direction to the second set of strands". Do the hook elements extend toward the second set of strands or do the hook elements extend in the same direction of the second set of strands? It is unclear what is meant by this recitation.

Claim 31 is rejected under 35 U.S.C 112, second paragraph, as being indefinite because of the recitation "projecting in at least a first direction". Is project supposed to mean the direction in which the hooks face? It is unclear what is meant by this recitation.

Claim 32 is rejected under 35 U.S.C 112, second paragraph, as being indefinite because of the recitation "extend in a direction perpendicular to said first direction".

Does extend mean the direction in which the hooks are organized on the backing layer? It is unclear what this recitation means.

Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. The recitation "functional foraminous layer" renders the claim indefinite because it is unclear as to what "functional" means in the specific situation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8, 11-15, and 35-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Nestegard ('060).

Nestegard teaches a hook fastener composite (col. 1, line 8) comprising a hook element (fig 1, #15) containing a backing element (fig 1, #11) having a first (fig 1, #12) and an outer face (fig 1, #13), and hook elements extending from at least one outer face (fig 1, #15) wherein the hook containing backing element is embedded within a fibrous

web (the backing is a fibrous web) such that the fibers of the web are present on both outer faces of the backing element (col. 2, line 40). As to claims 2-6, Nestegard teaches a hook containing backing element at least having strands containing discrete hook elements (fig 1, #15) extending linearly in at least one direction (fig 1, #15) wherein the strands are mutually parallel and extend in the longitudinal direction of the composite (fig 1, #14). As to claims 7 and 8, Nestegard teaches a nonwoven fibrous layer (web; col. 2, line 40) wherein the nonwoven fibrous layer has a basis weight of 3 ounces per square yard (101.5 grams per square meter; col. 9, lines 30-35). As to claim 11-15, Nestegard teaches a hook fastener composite comprising a flexible nonwoven fibrous (col. 2, line 40) (foraminous) plate and flexible hook members (elastic; col. 2, lines 46-50). As to claim 35, no patentable weight is given to the recitation "functional foraminous layer". As to claim 36-38, Nestegard teaches an article (wrap) (fig 9, #70) self engaging (fig 9, #10) comprising a closure element formed of a hook fibrous composite (fig 9, #10) comprising a plurality of strands extending in a first direction the strands having a first outer face and a second outer face and two side faces (fig 9, #10), and hook elements extending from at least one outer face wherein there the strands are embedded within a fibrous web (nonwoven fibrous layer) such that fibers of the web are present on both outer faces of the strands (col. 2, lines 40-41).

3. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Romanko et al. ('371).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Romanko teaches a hook fastener composite comprising a hook element containing backing element (fig 2, #11,14) having a first outer face (fig2, #12) and a second outer face (fig 2, #13), and hook elements extending from at least one outer face (fig 2, #14) wherein the hook containing backing element is embedded within a fibrous web such that fibers of the web are present on both outer faces of the backing element (fig 5, #71). Romanko et al. also teaches a hook fastener composite wherein the hook containing backing element at least has strand elements containing discrete hook elements (fig 2, #14) wherein the strand elements extend in one direction (fig 2, #14) and are mutually parallel and extend in the longitudinal direction of the composite (fig 2, #14).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nestegard ('060) in view of Kennedy et al. ('147).

Nestegard teaches a hook fastener composite as described above. Nestegard fails to teach a nonwoven fibrous web substantially unbonded by secondary bonding means.

Kennedy et al. teaches a hook fastener composite wherein the plastic from the fastener partially entraps the nonwoven fabric (col. 5, lines 48-50) and unbonded by any other means. If the nonwoven web is thick, the plastic will only marginally penetrate into the nonwoven and the backside of the fastener will have the appearance of a free standing fibrous nonwoven (col. 5, lines 62-64). Therefore, the nonwoven fabric is unbonded by secondary means (themal bonding, ultrasonic, etc.) for the purpose of having the appearance of a freestanding fibrous nonwoven.

Thus, it would have been obvious to one of ordinary skill in the art at the time applicants' invention was made to have provided an unwoven web unbonded by

secondary means (thermal bonding, ultrasonic, etc.) in Nestegard in order to maintain the appearance of a free standing fibrous unwoven layer as taught by Kennedy et al.

As to claim 10, the limitation of a carded nonwoven web is taught by Nestegard (col. 9, line 31).

5. Claims 16-18 and 20-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nestegard ('060) in view of Galkiewicz ('128).

Nestegard teaches a hook fastener composite as described above.

As to claims 16-18, Nestegard fails to teach a hook fastener composite wherein a second set of strands extend in a direction transverse to the first set of strands and the two sets of strands are joined at their crossover points further characterized wherein said second set of strands are mutually parallel and have a first face and a second face and two substantially parallel side faces and are substantially coextensive wherein said second set of strands second faces are attached to said first set of oriented strands at their crossover points.

Galkiewicz teaches a hook fastener composite wherein a second set of strands extend in a direction opposite (transverse) of the first set of strands (fig 6, #34) joined at their crossover point (fig 10) further characterized wherein second set of strands are mutually parallel and have a first face and a second face and two substantially parallel said faces and substantially coextensive (fig 6, #34,35) wherein said second set of strands second faces are attached to said first set of oriented strands at their crossover

points (fig 6, #34,35) for the purpose of undergoing interengagement with an identical or duplicate fastener (substantially coextensive and mutually parallel) (col. 6, lines 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicants invention was made to have provided a second set of strands identical to the first set of strands in Nestegard in order to interengage as taught by Galkiewicz.

As to claims 20-25, Nestegard also fails to teach a hook fastener composite wherein the first and second planar cross-sectional areas are substantially mutually exclusive and abutting wherein said second set of strands have a substantially rectilinear cross-section and are linear further characterized wherein adjacent strands of said second set of strands have a substantially identical cross-sectional shape in said first direction wherein second set of strands have surface structures on said first faces of the strands wherein said surface structures are stems extending upward.

Galkiewicz teaches a first and second planar fastener (cross-sectional area) (fig 6, #34) substantially mutually exclusive and abutting wherein the strands have a rectilinear cross-section (fig 1, #14) and are linear (fig 7a, #37) wherein the second set of strands are identical (fig 6) and second set of strands have surface structures on the first faces of the strands wherein said surface structures are stems extending upward (fig 6) for the purpose of undergoing interengagement with an identical or duplicate fastener (abutting and mutually exclusive) (col. 6, lines 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicants invention was made to have provided identical sets of strands wherein

the faces of the strands are mutually exclusive and abutting in Nestegard in order to undergo interengagement with an identical or duplicate fastener as taught by Galkiewicz.

As to claims 26-32, Nestegard also fails to teach a hook fastener wherein stem structures have hook elements projecting in at least one direction wherein said hook elements extend in the direction of the second set of strands further characterized wherein said hook elements extend in two or more directions and form a mushroom shape wherein said first set of strands have surface structures on said second face of said strands wherein said surface structures are stems extending upward wherein said stem structures have hook elements projecting in at least a first direction wherein said hook elements extend in a direction perpendicurlar to said first direction.

Galkiewicz teaches a hook fastener comprising hooks projecting in at least one direction of the second set of strands (fig 6) wherein hook elements extend in two directions (fig 7b, 36', 38') and form a mushroom shape (fig 7a, #38) wherein the first set of strands have surface structures on the second set of strands wherein surface structures are stems extending upward have hook elements projecting upward (fig 10) for the purpose of undergoing interengagement with an identical or duplicate fastener (mushroom-shaped hook element and strands extending in two directions) (col. 6, lines 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicants' invention was made to have provided identical sets of strands with hook

elements extending in two directions with a mushroom shape in Nestegard in order to undergo interengagement with an identical or duplicate fastener as taught by Galkiewicz.

As to claims 33 and 34, Nestegard teaches a hook fastener composite wherein a first and second set of strands are integrally formed (col. 6, lines 20-21) comprising a thermoplastic (col. 3, lines 30-31).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Wartalowicz whose telephone number is (571) 272-5957. The examiner can normally be reached on 8:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Wartalowicz
July 20, 2005

HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

7/21/05